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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/820,416	ENDLER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BLAINE BASOM	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 20 November 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2,4-11,26-28,30,32-35,37-40 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2,4-11,26-28,30,32-35,37-40 and 42-44 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/15/07</u> .  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

This Office action is responsive to the Request for Continued Examination (RCE) filed under 37 CFR §1.53(d) for the instant application on November 20, 2007. The Applicants have properly set forth the RCE, which has been entered into the application, and an examination on the merits follows herewith.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on November 15, 2007 was filed in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Response to Arguments***

The Examiner acknowledges the Applicants' amendments to claims 1, 4, 5, 11, and 26, and the Applicants' cancellation of claims 3, 36, and 41.

Regarding the pending claims, the Applicants argue that the art of record (i.e. the U.S. Patents to Minakuchi, Fitzmaurice, Barbieri, Bhatia, Brook, and Ano – all cited in the previous Office Action), fails to teach “capturing the first content with a content capturing device” and “the spherical displaying being disposed in a housing in direct physical communication with the content capturing device,” as is now claimed. The Examiner, however, respectfully disagrees with this argument.

As is more fully described below, Minakuchi describes an information retrieval method and apparatus in which main information, specified by the user, is displayed alongside sub-information by a display device (see e.g. column 2, line 65 – column 3, line 21). Minakuchi particularly discloses that the main information and its associated sub-information are presented via “virtual sphere” (see e.g. column 8, line 63 – column 9, line 14; and FIG. 5). With respect to the amended claims, Minakuchi discloses that both the main information and sub-information are stored within a memory device, which is in direct physical communication with a housing comprising the display device (see e.g. column 2, line 65 – column 3, line 20; and column 5, line 25 – column 6, line 4).

The Applicants’ specification does not provide any explicit definition of, or impose any particular limitations upon, the claimed “content capturing device.” Moreover, a commonly understood definition of “capture,” with respect to the art, is “to record in a permanent file (as in a computer)” (“Merriam-Webster’s Collegiate Dictionary, Tenth Edition”). Accordingly, the Examiner respectfully submits that the memory device of Minakuchi can be considered a “content capturing device,” given the broadest, most reasonable definition of such a device; the memory device of Minakuchi is used for capturing content, i.e. recording content in a permanent file. Minakuchi thus teaches capturing (i.e. storing) first content with a content capturing device (i.e. a memory device), and further teaches a spherical displaying being disposed in a housing in direct physical communication with the content capturing device (i.e. memory device), as is claimed.

The Applicant's arguments have thus been fully considered, but are not persuasive.

***Claim Objections***

Claim 26 is objected to because the following phrase is considered incomplete: “with a content capturing device for capturing the first content with a content capturing device.” Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 26, there is no antecedent basis for “the first content,” as is recited in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 6, 9-11, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,628,313 to Minakuchi et al. (hereafter “Minakuchi”) and U.S. Patent Application Publication No. 2004/0001111 to Fitzmaurice et al. (hereafter “Fitzmaurice”), as supported by “Merriam Webster’s Collegiate Dictionary, Tenth Edition” (hereinafter “Webster”). In general, Minakuchi describes an information retrieval method and apparatus in which main information, specified by the user, is displayed along with sub-information related to the main information (see e.g. column 2, line 65 – column 3, line 21). Minakuchi particularly discloses that the main information and its associated sub-information are presented via “virtual sphere” (see e.g. column 8, line 63 – column 9, line 14; and FIG. 5).

Specifically regarding claims 1 and 11, Minakuchi discloses: means for displaying a first content (i.e. “main information”) on a flat display surface within a spherical display (see e.g. column 2, line 65 – column 3, line 12; column 8, line 63 – column 9, line 14; and reference number 201 in FIG. 5); means for simultaneously displaying a second content (i.e. “sub-information”) on a spherical display surface within the spherical display (see e.g. column 2, line 65 – column 3, line 21; column 8, line 63 – column 9, line 14; and reference number 203 in FIG. 5); and means for scrolling through the second content (i.e. “rotating” the spherical display surface) based on instructions while displaying the first content (see e.g. column 9, lines 1-14),

wherein the spherical display surface is imposed over the flat display surface such that the first content and the second content are distinctly and simultaneously viewed (see e.g. FIG. 5).

Minakuchi further discloses that a “memory device” stores the first content, and further suggests that the memory device is in direct physical communication with a housing comprising the display device (see e.g. column 2, line 65 – column 3, line 20; and column 5, line 25 – column 6, line 4). A commonly understood definition of “capture,” with respect to the art, is “to record in a permanent file (as in a computer)” (see e.g. the definition of "capture" provided by Webster).

The memory device of Minakuchi is thus considered a “content capturing device,” given the broadest, most reasonable definition of such a device; the memory device of Minakuchi is used for capturing content, i.e. recording content in a permanent file. Accordingly, Minakuchi further teaches capturing the first content with a content capturing device (i.e. a memory device), and that the display is disposed in a housing in direct physical communication with the content capturing device, as is claimed. Minakuchi thereby teaches a method and system like recited in claims 1 and 11, respectively. Minakuchi, however, does not explicitly disclose that the spherical display surface is a *physical* spherical display surface, as is recited in claims 1 and 11. Nevertheless, physical spherical displays are well known in the art.

For example, Fitzmaurice demonstrates displaying content via a volumetric display, which can take the form of a physical spherical display (see e.g. paragraph 0024, and FIG. 1). Fitzmaurice further teaches displaying first content on a flat display surface within the spherical display and second content on a physical spherical display surface within the spherical display (see e.g. paragraphs 0012-0014; paragraph 0025; and FIG. 2).

It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi and Fitzmaurice before him at the time the invention was made, to implement the information retrieval method of Minakuchi on the volumetric display of Fitzmaurice, i.e. to display the first content on a flat display surface within the volumetric display and to simultaneously display the second content on a physical display surface within the volumetric display. It would have been advantageous to one of ordinary skill to utilize this combination because such a volumetric display allows a user to have a *true* three-dimensional view of the content, as is taught by Fitzmaurice (see e.g. paragraph 0024). Accordingly, Minakuchi and Fitzmaurice teach a method and system like that of claims 1 and 11, respectively.

As per claim 2, Minakuchi further teaches storing the first content (i.e. “main information”) and the second content (i.e. “sub-information”) in a storage device (see e.g. column 2, line 65 – column 3, line 12; and column 5, lines 56-58).

As per claim 6, Minakuchi suggests that the above-described method and system can be applied to search through pictures (see e.g. column 1, line 64 – column 2, line 35). In such situations, the first content is one of a video stream and digital image, like claimed.

Concerning claim 9, Minakuchi demonstrates that the second content (i.e. the “sub-information”) comprises a plurality of icons or thumbnails from which the user may select (see e.g. FIGS. 5-7; column 6, lines 33-40; column 9, lines 1-14; and column 9, lines 34-58). The second content described by Minakuchi is thus considered “menu information” like claimed.

With respect to claim 10, Minakuchi demonstrates that the spherical display surface displays the second content (i.e. the “sub-information”) in a three dimensional viewpoint (see e.g. column 8, lines 63-67; and reference number 203 in FIG 5).

As per claims 30 and 35, Fitzmaurice demonstrates that the spherical display is semi-spherically shaped, wherein the spherical display surface substantially spans the semi-spherical shape of the spherical display and the flat display surface is coupled to the spherical display surface and spans a diameter of the spherical display surface (see e.g. paragraph 0025 and FIG. 2).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Webster, which is described above, and also over U.S. Patent No. 7,107,516 to Anderson et al. (hereafter “Anderson”). As described above, Minakuchi, Webster, and Fitzmaurice teach a method like that of claim 1, used for searching for information, in which first content provided by a content capture device is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Minakuchi suggests that such content can comprise pictures, as is described above (see e.g. the rejection for claim 6). Minakuchi, however, discloses that the content capture device providing the content is a memory device (see e.g. the rejection for claim 1), and not a digital camera as required in claim 4.

Nevertheless, providing content (i.e. pictures) from a digital camera that is in direct physical communication with a display device is well known in the art. For example, Anderson demonstrates directly coupling a display device to a digital camera for the purpose of viewing and searching content captured by the camera (see e.g. column 2, lines 30-51; and column 4, lines 19-44).

Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster, Fitzmaurice, and Anderson before him at the time the invention was made, to couple a camera to the spherical display of Minakuchi, and Fitzmaurice, since this would allow the user to view on the display content captured by the user, as is demonstrated by Anderson.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Anderson, and Webster, as is described above, and also over PCT Publication No. WO 02/21529 to Barbieri. As described above, Minakuchi, Webster, and Fitzmaurice teach a method like that of claim 1, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Anderson further teaches directly coupling a content capture device (i.e. a digital camera) to the spherical display for the purpose of searching through and displaying images captured by the content capture device, as is described above (see the rejection for claim 4). Minakuchi, Fitzmaurice, Webster, and Anderson, however, do not explicitly disclose that the content capturing device is a video camera, like recited in claims 5. Nevertheless, capturing video streams with a video camera, and then searching through the captured information is well known in the art.

For example, Barbieri teaches displaying a digital video image (considered analogous to the “main information” of Minakuchi) and determining similar video images (considered analogous to the “sub-information” of Minakuchi) that are associated with the video image (see e.g. page 2, lines 11-34). Such digital video images are necessarily taken with a content

capturing device, i.e. a digital video camera, as is well-known in the art (see e.g. page 9, lines 31-34 of Barbieri).

Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster, Fitzmaurice, Anderson, and Barbieri before him at the time the invention was made, to apply the spherical display of Minakuchi and Fitzmaurice to search for particular video images within a video stream captured by a digital video camera, like taught by Barbieri. That is, it would have been obvious to modify the spherical display of Minakuchi and Fitzmaurice such that the main information (i.e. the first content) is a video image, which has been captured by a content capturing device, i.e. a digital video camera. It would have been advantageous to one of ordinary skill to apply the interface of Minakuchi to search video, because video search functionality is becoming useful due to the increase of multimedia data that can be stored in home devices, as is taught by Barbieri (see e.g. page 1).

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, and Webster, as is described above, and also over U.S. Patent Application Publication No. 2002/0030665 to Ano. As described above, Minakuchi, Webster, and Fitzmaurice teach a method like that of claim 1, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. This second content is scrolled in response to instructions based on an input device, e.g. a trackball (see e.g. paragraph 0082). As such, Minakuchi does not explicitly disclose that these instructions for scrolling are based on rotating a playback ring or knob, as is expressed in claims 7-8.

Nevertheless playback rings and knobs are well-known types of input devices used for scrolling displayed information. For example, Ano describes a playback ring (i.e. a “wheel”), considered a type of knob, which is used in conjunction with, e.g. a trackball, to scroll through content displayed on a screen (see e.g. paragraphs 0005, 0009, and 0098-0101).

It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster, Fitzmaurice, and Ano before him at the time the invention was made, to apply the playback ring of Ano to scroll through the displayed content of Minakuchi and Fitzmaurice, i.e. to rotate the spherical display. It would have been advantageous to one of ordinary skill to use such a playback ring, because it allows the user to more efficiently scroll through content, as is demonstrated by Ano (see e.g. paragraphs 0006-0009).

Claims 32 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, and Barbieri, which is described above (i.e. in the rejection for claim 5). As described above, Minakuchi, Webster, and Fitzmaurice teach a method like that of claim 1 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 5). Minakuchi, Webster, Fitzmaurice, Anderson, and Barbieri, however, do not explicitly teach controlling at least one of the direction and speed of such a video stream, as is required by claims 32 and 37. Nevertheless proving users the ability to control the direction and speed of playback

of a video stream (by e.g. fast forward, reverse, etc. functions) is notoriously well known in the art. The Examiner takes OFFICIAL NOTICE of this teaching. Accordingly, it would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Fitzmaurice, Anderson, and Barbieri before him at the time the invention was made, to allow a viewer watching the first content (e.g. a video stream) displayed by the spherical display of Minakuchi, Fitzmaurice, Anderson, and Barbieri to change the direction or speed of playback of the content, like known in the art. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, skip over parts of the content (i.e. by fast forward operations) that are not interesting to the user, as is known in the art.

Claims 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, and Barbieri, which is described above (i.e. in the rejection for claim 5), and also over U.S. Patent Application Publication No. 2004/0264579 to Bhatia et al. (hereafter “Bhatia”). As described above, Minakuchi, Webster, and Fitzmaurice teach a method like that of claim 3 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 5). Minakuchi, Webster, Fitzmaurice, Anderson, and Barbieri, however, do not explicitly disclose that multiple video feeds are simultaneously displayed, as is required by claims 33 and 38. Nevertheless, simultaneously displayed multiple video feeds are well known in the art. For

example, Bhatia demonstrates a method for simultaneously displaying a plurality of video streams (see e.g. paragraphs 0011-0014). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster, Fitzmaurice, Barbieri, Anderson, and Bhatia before him at the time the invention was made, to apply the display of Minakuchi, Fitzmaurice, Anderson, and Barbieri to simultaneously display a plurality of video feeds, because it is a useful feature in video presentation systems, as taught by Bhatia (see e.g. paragraphs 0004-007).

Claims 34 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, and Barbieri, which is described above (i.e. in the rejection for claim 5), and also over U.S. Patent Application Publication No. 2003/0146915 to Brook et al. (hereafter “Brook”). As described above, Minakuchi, Webster, and Fitzmaurice teach a method like that of claim 1 and a system like that of claim 11, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 5). Minakuchi, Webster, Fitzmaurice, Anderson, and Barbieri, however, do not explicitly disclose that the spherical display is configured to apply special effects (i.e. sepia tone, black and white tone, and/or slow shutter effect) to a portion of this content, as is required by claims 34 and 39. Nevertheless applying such special effects to video is well known in the art. For example, Brook demonstrates applying sepia tone and black and white special effects (see e.g. paragraph 0186). It would have been obvious to one of ordinary skill in the art, having the teachings of

Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Brook before him at the time the invention was made, to modify the display of Minakuchi, Fitzmaurice, Anderson, and Barbieri to apply special effects to the content, like taught by Brook. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, change to appearance of the content to suit his or her taste, as is demonstrated by Brook.

Claims 26-28 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, and Barbieri, which is described above (i.e. in the rejection for claim 5), and also over the teachings of Ano, also described above.

Specifically regarding claim 26, Minakuchi describes a spherical display for simultaneously displaying first content and second content, wherein the spherical display comprises a flat display surface for the first content and a spherical display surface for the second content, and wherein the first and second content are stored in a storage module, as is described above. Minakuchi further demonstrates that this second content comprises menu information, and Barbieri teaches applying such an interface to search for video content, i.e. such that the first content comprises a video stream, as is described above. Anderson teaches directly coupling a content capture device to the spherical display for the purpose of searching a displaying images captured by the content capture device. Fitzmaurice demonstrates a physical spherical display, as is further described above. Accordingly, the above-described combination of Minakuchi, Webster, Fitzmaurice, Anderson, and Barbieri teach a device similar to that of claim 26, which comprises: a content capturing device for capturing first content (i.e. video); a physical spherical display for simultaneously displaying first content (i.e. a video stream) and second content (i.e.

menu information) wherein the spherical display comprises a flat display surface for the first content and a spherical display surface for the second content, the spherical display being disposed in a housing in direct physical communication with the content capturing device; and a storage module to store the first content and second content. Minakuchi discloses that this second content is scrolled (i.e. the spherical display is rotated) in response to instructions based on an input device, e.g. a trackball, as is described above. As such, Minakuchi, Webster, Fitzmaurice, Anderson, and Barbieri do not explicitly disclose that these instructions for scrolling are based on rotating a playback ring, as is expressed in claim 26. Nevertheless playback rings are well-known types of input devices used for scrolling displayed information. For example, Ano describes a playback ring (i.e. a “wheel”), which is used in conjunction with, e.g. a trackball, to scroll through content displayed on a screen (see e.g. paragraphs 0005, 0009, and 0098-0101). It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster, Barbieri, Anderson, Fitzmaurice, and Ano before him at the time the invention was made, to apply the playback ring of Ano to scroll through the displayed content of Minakuchi and Barbieri, i.e. to rotate the spherical display. It would have been advantageous to one of ordinary skill to use such a playback ring, because it allows the user to more efficiently scroll through content, as is demonstrated by Ano (see e.g. paragraphs 0006-0009).

As per claim 27, Minakuchi demonstrates displaying the second content, i.e. menu information, with a three dimensional effect to distinguish it from the first content, i.e. video stream (see e.g. FIG. 5). Accordingly, the combination of Minakuchi, Fitzmaurice, Anderson, Barbieri, and Ano described in the previous paragraph teaches a device like that of claim 27.

Concerning claim 28, Minakuchi demonstrates displaying the second content, i.e. menu information, overlaid on top of the first content, i.e. video stream (see e.g. FIG. 5). Accordingly, the above-described combination of Minakuchi, Fitzmaurice, Anderson, Barbieri, and Ano teaches a device like that of claim 28.

As per claim 40, Fitzmaurice demonstrates that the spherical display is semi-spherically shaped, wherein the spherical display surface substantially spans the semi-spherical shape of the spherical display and the flat display surface is coupled to the spherical display surface and spans a diameter of the spherical display surface (see e.g. paragraph 0025 and FIG. 2).

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri, and Ano, which is described above. As described above, Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Ano teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Ano, however, do not explicitly teach controlling at least one of the direction and speed of such a video stream, as is required by claim 42. Nevertheless proving users the ability to control the direction and speed of playback of a video stream (by e.g. fast forward, reverse, etc. functions) is notoriously well known in the art. The Examiner takes OFFICIAL NOTICE of this teaching. Accordingly, it would have been obvious to one of

ordinary skill in the art, having the teachings of Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Ano before him at the time the invention was made, to allow a viewer watching the first content (e.g. a video stream) displayed by the spherical display of Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Ano to change the direction or speed of playback of the content, like known in the art. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, skip over parts of the content (i.e. by fast forward operations) that are not interesting to the user, as is known in the art.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri, and Ano, which is described above, and also over U.S. Patent Application Publication No. 2004/0264579 to Bhatia et al. (hereafter “Bhatia”). As described above, Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Ano teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Fitzmaurice, Anderson, Barbieri, and Ano, however, do not explicitly disclose that multiple video feeds are simultaneously displayed, as is required by claim 43. Nevertheless, simultaneously displayed multiple video feeds are well known in the art. For example, Bhatia demonstrates a method for simultaneously displaying a plurality of video streams (see e.g. paragraphs 0011-0014). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster,

Fitzmaurice, Anderson, Barbieri, Ano, and Bhatia before him at the time the invention was made, to apply the display of Minakuchi, Fitzmaurice, Anderson, Barbieri, and Ano to simultaneously display a plurality of video feeds, because it is a useful feature in video presentation systems, as taught by Bhatia (see e.g. paragraphs 0004-007).

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Minakuchi, Fitzmaurice, Webster, Anderson, Barbieri, and Ano, which is described above, and also over U.S. Patent Application Publication No. 2003/0146915 to Brook et al. (hereafter “Brook”). As described above, Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri and Ano teach a device like that of claim 26, used for searching for information, in which first content is displayed on a flat surface within a spherical display and second content is displayed within a spherical display surface of the spherical display. Barbieri particularly teaches that the first content can be a video stream or digital image captured with a content capturing device, as is described above (see e.g. the rejection for claim 3). Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, and Ano, however, do not explicitly disclose that the spherical display is configured to apply special effects (i.e. sepia tone, black and white tone, and/or slow shutter effect) to a portion of this content, as is required by claim 44. Nevertheless applying such special effects to video is well known in the art. For example, Brook demonstrates applying sepia tone and black and white special effects (see e.g. paragraph 0186). It would have been obvious to one of ordinary skill in the art, having the teachings of Minakuchi, Webster, Fitzmaurice, Anderson, Barbieri, Ano, and Brook before him at the time the invention was made, to modify the display of Minakuchi, Fitzmaurice, Anderson, Barbieri, and Ano to apply special

effects to the content, like taught by Brook. It would have been advantageous to one of ordinary skill to apply this modification because it allows the user to, for example, change to appearance of the content to suit his or her taste, as is demonstrated by Brook.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom, whose telephone number is (571)272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached at (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tadesse Hailu/  
Primary Examiner, Art Unit 2173

btb

Application/Control Number: 10/820,416  
Art Unit: 2173

Page 20

2/29/2008